

Supplementary Information

Dual Emission in a Ligand and Metal Co-Doped Lanthanide-Organic Framework: Color Tuning and Temperature Dependent Luminescence

Despoina Andriotou ¹, Stavros A. Diamantis ¹, Anna Zacharia ², Grigorios Itskos ², Nikos Panagiotou ³, Anastasios J. Tasiopoulos ³ and Theodore Lazarides ^{1,*}

¹ Department of Chemistry, Aristotle University of Thessaloniki, 54124 Thessaloniki, Greece; despoina.andriotou95@gmail.com (D.A.); stvrodiamantis@gmail.com (S.A.D.)

² Department of Physics, University of Cyprus, 1687 Nicosia, Cyprus; zacharia.anna@ucy.ac.cy (A.Z.); atasio@ucy.ac.cy (G.I.)

³ Department of Chemistry, University of Cyprus, 1687 Nicosia, Cyprus; panagiotou.nikos@ucy.ac.cy (N.P.); atasio@ucy.ac.cy (A.J.T.)

* Correspondence: tlazarides@chem.auth.gr; Tel.: +30-2310-997853

Table S1. Selected bond lengths and angles for **1**.

Bond lengths	(Å)	Angles	(°)
La1-Cl1	2.988	La1-Cl1-La1'	86.30
La1'-Cl1	2.862	La1-O1-La1'	102.70
La1-O1	2.608	O1-La1-O2	50.05
La1-O2	2.570	Cl1-La1-Cl1'	141.65
La1-O3	2.463	O1-La1-O1'	68.07
La1'-O1	2.515	O1-La1-O2	50.05

Table S2. Crystal and refinement data for **9**.

Chemical formula	C ₁₇ H _{6.37} ClLaN _{1.19} O ₅
Formula mass	481.58
Crystal description	block
Crystal size (mm)	0.071; 0.021; 0.018
Crystal system	orthorhombic
a(Å)	7.4701(4)
b(Å)	25.7440(14)
c(Å)	9.4625(7)
α(°)	90
β(°)	90
γ(°)	90
Unit cell Vol (Å ³)	1819.74(19)
Temperature (K)	100
Space group	P n m a
Z	2
No. of reflections measured	7804
No. of unique reflections	2240
No. of parameters/restraints	147/43
Restrained GooF	1.104
R _{int}	0.050
R[F ² >2σ(F ²)]	0.045
R[All data]	0.062
wR(F ²)	0.125

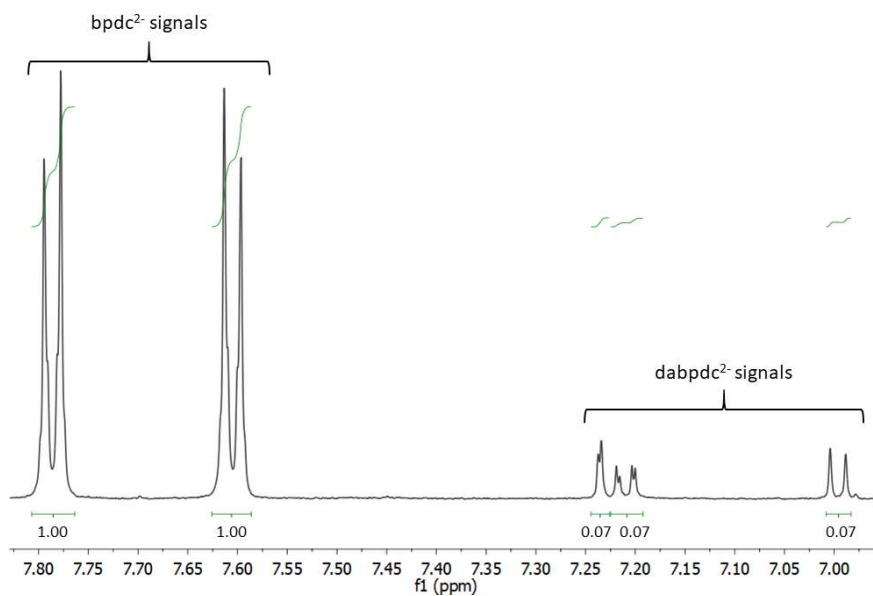


Figure S1. ^1H -NMR spectrum of a digested sample of **2** in $\text{D}_2\text{O}/\text{NaOH}$.

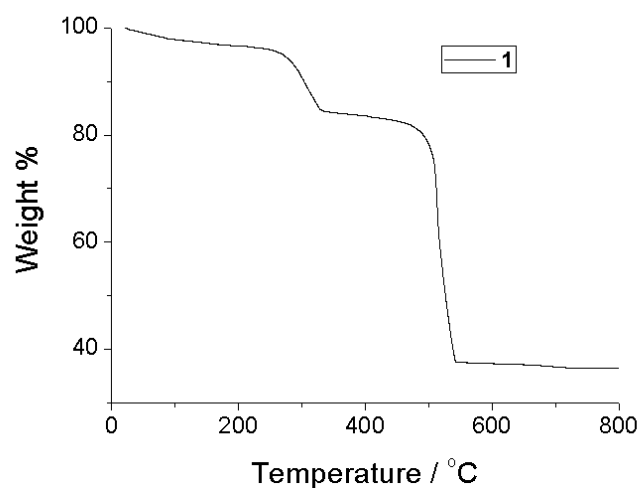


Figure S2. The TGA curve for **1**.

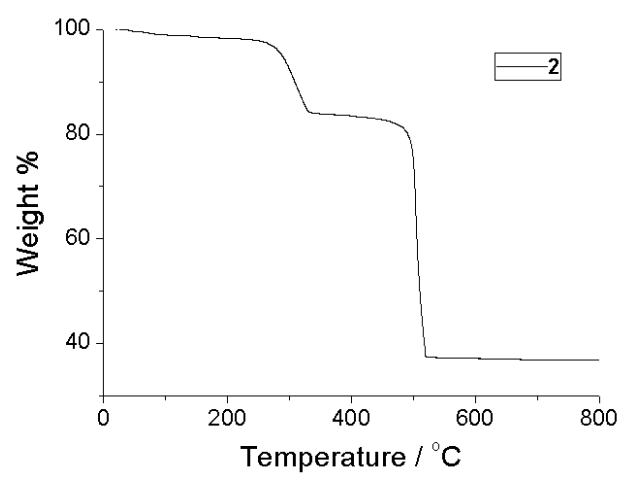


Figure S3. The TGA curve for **2**.